Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application. In the Office communication mailed November 29, 2006, the Examiner asserts that new claims 21-35 are directed to non-elected subject matter and are distinct from currently canceled claims 1-10 which were the object of Office Action mailed May 18, 2006. In order to be fully responsive, new claims 36-46 are presented, which are the same as or indistinct from canceled claims 1-10. Similarly to canceled claims 1-10, new claims 36-43 are directed to a biosensor and simulation system and method for using the same. Furthermore, independent claim 36 and 40 (canceled claims 1 and 6) incorporate embodiments encompassed by canceled claims 3 and 8.

Claims:

1. – 35. (Canceled)

36. **(New)** Integrated biosensor and simulation system comprising: a sensor for sensing a biological target to generate a signal; and a simulator for using the signal and a model of the target to generate a therapeutic or diagnostic output; and wherein said sensor is reconfigurable by said simulator.

37. **(New)** The system of claim 36 wherein: the sensor senses a food material for consumption by the biological target to generate a second signal, the simulator further using the second signal to generate the therapeutic or diagnostic output.

38. **(New)** The system of claim 36 wherein: the simulator generates the output according to a regulatory condition.

39. **(New)** The system of claim 36 wherein: the sensor couples to the simulator via a programmable switch.

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40. **(New)** Automated sensor and simulation method comprising the steps of: sensing a biological target to generate a signal; simulating using the signal and a model of the target to generate a therapeutic or diagnostic output; and wherein said simulator reconfigures said sensor.

41. **(New)** The method of claim 40 wherein: the sensor senses a food material for consumption by the biological target to generate a second signal, the simulator further using the second signal to generate the therapeutic or diagnostic output.

42. **(New)** The method of claim 40 wherein: the simulator generates the output according to a regulatory condition.

43. **(New)** The method of claim 40 wherein: the sensor couples to the simulator via a programmable switch.

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